**SAS IO Card Cabling**

Directly connect the host servers to the storage system.

**SAS 4 Port Configuration**
1. Connect SAS fault domain 1 (in orange) to server 1.
   - Top storage controller: port 1 to port on server 1
   - Bottom storage controller: port 1 to port on server 1
2. Connect SAS fault domain 2 (in blue) to server 2.
   - Top storage controller: port 2 to port on server 2
   - Bottom storage controller: port 2 to port on server 2
3. Connect SAS fault domain 3 (in gray) to server 3.
   - Top storage controller: port 3 to port on server 3
   - Bottom storage controller: port 3 to port on server 3
   - Top storage controller: port 4 to port on server 4
   - Bottom storage controller: port 4 to port on server 4

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**iSCSI Mezzanine Card Cabling**

If the storage system includes an iSCSI mezzanine card, connect the host servers and storage system to Ethernet switches.

**iSCSI 4 Port Mezzanine Card Configuration**
1. Connect each host server to both Ethernet switches.
   - Connections shown in orange belong to fault domain 1.
   - Connections shown in blue belong to fault domain 2.
2. Connect iSCSI fault domain 1 (in orange) to switch 1.
   - Top storage controller: port 1 to switch 1
   - Top storage controller: port 3 to switch 1
   - Bottom storage controller: port 1 to switch 1
   - Bottom storage controller: port 3 to switch 1
3. Connect iSCSI fault domain 2 (in blue) to switch 2.
   - Top storage controller: port 2 to switch 2
   - Top storage controller: port 4 to switch 2
   - Bottom storage controller: port 2 to switch 2
   - Bottom storage controller: port 4 to switch 2
To add capacity to your storage system, you can connect up to sixteen SCv300, eight SCv320, or two SCv360 expansion enclosures to an SCv3000 series storage system. A maximum of 222 physical disks are supported in an SCv3000 series storage system. Each expansion enclosure includes two Enclosure Management Modules (EMM) in two interface slots.

**CAUTION:** If the storage system is installed without expansion enclosures, do not interconnect the back-end SAS ports on the storage controllers.

### Set up the Power Cables

1. **Connect the Power Cables**
   - Power on any network switches, routers, or other network components.
   - Power on the storage system by turning on both power supply/cooling fan modules.
   - Power on any expansion enclosures that might be a part of the system.
   - Power on the storage system by turning on both power supply/cooling fan modules.

### Connect the Power Cables

**CAUTION:** Make sure that the power switches are in the OFF position before connecting the power cables.

1. Connect the power cables to both power supply/cooling fan modules in the storage system chassis.
2. Use the velcro straps to secure the power cables to the storage system chassis.
3. Plug the other end of the power cables into a grounded electrical outlet or a separate power source such as an uninterruptible power supply (UPS) or a power distribution unit (PDU).

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**NOTE:** Each expansion enclosure includes two Enclosure Management Modules (EMM) in two interface slots.

### Chain 1: A Side (Orange)

1. Connect port 1 on the top storage controller to port 1 on the top EMM of the first expansion enclosure.
2. Connect the remaining expansion enclosures in series from port 2 to port 1 using the top EMMs.
3. Connect port 2 on the top EMM of the last expansion enclosure to port 2 on the bottom storage controller.

### Chain 1: B Side (Blue)

1. Connect port 1 on bottom storage controller to port 1 on the bottom EMM of the first expansion enclosure.
2. Connect the remaining expansion enclosures in series from port 2 to port 1 using the bottom EMMs.
3. Connect port 2 on the bottom EMM of the last expansion enclosure to port 2 on the top storage controller.

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**CAUTION:** Do not power off the storage system until it can be discovered with the Storage Manager.

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**NOTE:** The initial setup wizards are only supported on 64-bit operating systems.

### Install and Start the Storage Manager Client

2. Download the Storage Manager for your operating system.
3. Install the Storage Manager Client on the host server.

### Discover and Configure Storage Center Wizard

1. Click the Discover and Configure Uninitialized Storage Centers icon.
2. Install the drivers and make sure that the latest supported BIOS is installed.
3. Install the Storage Manager Client on the host server.
4. Install supported HBA drivers and make sure that HBA drivers have the latest supported firmware.
5. Use the SAS cabling diagram to cable the host servers to the storage system.

### VMware ESXi Hosts

- **Configure VMkernel to Access a Storage Center**
  - Install the iSCSI HBAs or network adapters (NICs) and make sure that the latest supported BIOS is installed.
  - Install the iSCSI HBAs or NICs dedicated for iSCSI traffic in the host servers.
  - Install supported iSCSI HBA drivers and make sure that iSCSI HBAs have the latest supported firmware.
  - Use the iSCSI cabling diagram to cable the host servers to the Storage Center.

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### Configure Host Access to a Storage Center

1. Install the Storage Manager Client on the host server.
2. Click the Configure Host Access to a Storage Center icon.
3. Choose the storage system to access and configure the best practices for performing I/O.
4. When the host configuration is complete, use the Storage Manager Client to create and map volumes.

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### Notes, Cautions, and Warnings

- **NOTE:** Indicates important information that helps you make better use of your product.
- **CAUTION:** Indicates potential damage to hardware or loss of data and I/O if you fail to avoid the problem.
- **WARNING:** Indicates a potential for property damage, personal injury, or death.

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**Quick Resources Locator**

- Dell.com/EMC/Storage/SCv3x00series
- Scan to view how-to videos, documentation, and troubleshooting solutions.